

## **Final Summary Notes**

### **Habitat Sub-Committee Meeting Friday, November 18, 2005, Baxter Building, Lordsburg, New Mexico**

Meeting participants: Bill Van Pelt (AGFD), Jony Cockman (BLM), Levi Klump (citizen), Michael Robinson (Center for Biological Diversity), Bobbi Barrera (USFS), Stephen Williams (ASLD), Susan Krentz (citizen), Judy Keeler (citizen), Richard Searle (Cochise County), Tonya Lowery (Hidalgo County Assessor), Sara Shute (Jaguar Conservation Fund), Penny Driscoll (NRCS), Ben Brown (Malpai Borderland Group), H. Kuenstler (Hidalgo County), Elan Head (citizen), Kurt Bradley (Center for Biological Diversity), Matt Skroch (Sky Island Alliance), Scotty Johnson (Defenders of Wildlife), Craig Miller (Defenders of Wildlife), Gary Helbing (USFS), Dusti Baker (University of New Mexico-Gallup), Dave Parsons (citizen), Chuck Hayes (NMDGF), Tony Povilitis (citizen), Mark Crites (USFWS)

At 1001 hours, the Jaguar Habitat Subcommittee (JAGHAB) meeting was called to order by Chairperson, Bill Van Pelt, AZGFD. His introductory statements indicated that the focus of today's meeting concerned the identification of suitable jaguar habitat for the state of New Mexico & more specifically it was to address the draft New Mexico Habitat Suitability Report submitted by Michael Robinson, Center for Biological Diversity (CBD). The CBD volunteered to draft a report applying the potential habitat identification criteria developed by the Jaguar Conservation Team (JAGCT) because of funding constraints identified by the New Mexico Department of Game and Fish.

Following the introductory remarks, those in attendance introduced themselves & a sign-up sheet was circulated (Refer to the sign-up sheet for participant information). The Group then was referred to or reminded about the AZ Game and Fish Department's web site address ([www.AZGFD.gov](http://www.AZGFD.gov)) with links to the jaguar page as a centralized source for updated Jaguar Conservation Team information/communications etc.

The Chair presented a brief overview of Jaguar Conservation Team's history and its involvement in identifying potential jaguar habitat. Since the Team's formation in March 1997, the Team has been working toward the accomplishment of 8, agreed upon, objectives; Each of these objectives was read to the Group; Objective-5 being identified as the reason for today's meeting.

In summary, the Objective-5 accomplishments/progress to date were that in 2000-2001, jaguar habitat suitability identification & mapping was initiated in AZ; in 2002 jaguar habitat suitability identification & mapping was initiated in NM; in 2003 jaguar habitat identification & mapping was completed in AZ; in August 2004 JAGHAB met in Albuquerque, NM to review findings/analysis provided by the NMDGF and discuss criteria differences relative to NM jaguar habitat identification/mapping and the criteria agreed upon by JAGCT.

Referencing the 2<sup>nd</sup> Draft Habitat Suitability Report developed by CBD, the Chairperson passed out copies of the written comments received to date from members of the Subcommittee and the Jaguar Scientific Advisory Group. An active email address for Alan Rabinowitz was not obtained until after this meeting. The report has been sent to him for review but to date no comments have been received from him. Comments were received from James Hatten (JAGHAB), Anthony Povilitis (JAGHAB), Brian Miller (JAGSAG), Gary Helbing (JAGHAB),

Howard Quigley (JAGSAG), Chuck Hayes (JAGHAB), and Judy Keeler (JAGHAB). However, due to an administrative error, J Keeler comments were inadvertently left out of the materials provided to the group for reference.

Prior to proceeding, Michael Robinson reviewed the CBD's efforts relative to their drafting of the NM Jaguar Habitat Suitability report. He expressed the CBD's perception of the potential shortcomings of the established habitat suitability criteria, mentioning that new information about jaguars' historical use of grasslands (ie. non-montane) habitats was not part of the criteria developed in the late 1990s. He thanked those individuals for pointing out that delineation of mountain range boundaries is inherently subjective, and explained that the new draft used a terrain ruggedness index to standardize delineation of mountain ranges, consistent with the intent of the Scientific Advisory Group in suggesting such an index.

Following these introductory remarks, Chairperson decided today's exercise would commence by reading each of the submitted comments, one-by-one, aloud and Michael would state how the CBD responded to these comments in their 2<sup>nd</sup> draft; The Chairperson elected that the comments from G. Helbing, Coronado NF (refer to submitted comments), would be addressed first.

For Comment #1, the response was that there was no substantive revision to Report, Comment #2: it was indicated that revisions were made in response to the comments; Comment #3, the editing error was corrected. Following reference to Comment #4, there were several interjections from the Group such as the lack of preparedness in being able to discuss the submitted comments, that differences between the Center's 1<sup>st</sup> & 2<sup>nd</sup> draft could be highlighted as means of accelerating this process/discussion & that a strike-thru-version should be provided by the CBD to facilitate this review;

After the Group refocused their attention to the process underway, Michael attempted to respond to the next written comment concerning why a road analysis was not included in this draft. He indicated that this issue could be addressed in the next revised version. At this point, it was recommended by C Hayes, NMDGF, that not only should the CBD's analysis address road density relative to poaching affects but that the affects of habitat fragmentation & area development need to be incorporated into the road density analysis.

Following another brief discussion, A Povilitis inquired whether the CBD's Report had met the established habitat suitability criteria as they were tasked. If so, then the assessment/analysis should be accepted so that this effort could progress forward.

Following further discussions but no real resolution to this question, the comment review/response process continued; With the Center's reference to & attempted response to the comment concerning "what is the basis for the use of just 15-sightings from a 1998-database", what ensued was a rather lengthy, convoluted Group discussion about the validity & the credibility of the various jaguar sightings used in the assessment/analysis; in particular, sighting #'s 1, 3, 5, 8, & 11. Concerns were raised by members of the Group/Sub-committee concerning how the sightings, in particular Bailey's, were documented in the Report; These concerns lead to

discussions relative to the validity/credibility of Bailey's sightings in general. B. Brown felt that many of Bailey's reports might have been embellished cowboy stories. M Robinson responded that Bailey was considered an expert and he exercised critical judgment about which sightings were credible and expressed doubt about an 1825 report (that was excluded from the CBD's habitat report), that his judgment accords with the habitat subcommittee's criteria for class 2 sightings (made by an "experienced and reliable observer"). M. Robinson also pointed out AZ used written accounts of second-hand reports in their analysis (ie. sightings 33 & 34 in the AZ habitat report). The CBD was advised or encouraged that the citations they used in support of their analysis/conclusions need to be properly/adequately documented. While CBD had cited materials, it was not done in such a manner that Tables could be stand alones.

Again, considerable discussion(s) was/were generated relative to the use of the various listed sightings & classifications and their credibility. Several more attempts were made in order to bring the Group back into "focus" but to no avail. During these attempts, which involved approximately a 45-minute period, there were assorted discussions & questions relative to jaguar habitation in the southwest, the use of "marginal" habitats in the analysis, what sightings were used by the AZGFD & the level of "credibility", documentation & validity of the various data, how & why the AZGFD took a more subjective approach in their analysis which had been approved, and the 2003/2004 "subjective" approach taken by the NM Department of Game & Fish and why it was not accepted by JAGHAB in August 2004.

It was pointed out that the Gap Analysis was completed in AZ at the time the AZ was assessing jaguar habitat/data but at the time it had not been completed in NM; since then, the Gap Analysis (or Re-Gap Analysis) for NM has been completed, and it was used in the CBD's report. C. Hayes pointed out that at about the time AZ was going through their process that due to budgetary constraints etc that the NMDGF could not address their share of Objective-5 until July 2006.

Again, there were "extensive" discussions relative to the acceptance of the CBD's Report as is, about the mapping results which were being referred to as the "purple bubble map" that the Center's GIS analysis had generated, whether or not these results represented credible results that the JAGHAB should accept or if the resolution of these "issues" could be or should be left to the JAGCT. Also, J Keeler and S. Krentz expressed their concern whether JAGHAB had the science to support the NM report developed by the CBD. Several participants noted that completion of Objective 5 was several years overdue and objected to further delays. the completion of NM's portion of Objective-5, additional map credibility versus attainment of the habitat suitability criteria tasks by the Center discussions ensued.

At approximately 1215, the Group broke for a much-needed break & lunch. At that time a revised agenda for afternoon's discussion was highlighted/suggested. Items for discussion were to be an overview of the CBD GIS approach, an overview of the AZGFD GIS approach and further discussions relative to the validity of jaguar sightings #8 & #11 and the consideration of jaguar sightings #2 & #3 as "out-liers" in the analysis.

Following lunch, C Bradley, GIS Specialist, Center for Biological Diversity reviewed/presented the GIS process used by the Center. For the 5, established jaguar habitat suitability criterion, a 50-mile buffer approach was used for the documented jaguar occurrences. A 50-mile radius circle was drawn around each “documented” jaguar sighting identified. If a mountain range fell within that “circle”, the entire mountain range was included. In order to determine the extent of the mountain range to be included, a terrain roughness index approach was applied. For the vegetation classifications, the 1996 New Mexico GAP land cover data was used. This was done by relating NM GAP to the Brown, Lowe, & Pace Biome Classifications to the 1996 GAP Ecotypes. Potential water source locations were mapped via a 10-mile buffer approach based on the National Hydrologic Data Set. Agricultural, developed, and mined areas were mapped using the 2005 Southwest Re-Gap data. Areas with development greater than one house per 10 acres were mapped using census block data.

Following Curtis’s presentation, B Van Pelt reviewed the process used by the AZGFD described in the Department’s published Jaguar Habitat Suitability Report. In their approach, AZ looked at biomes greater than 50-miles from recorded sightings. In addition, it was assumed that the entire State (AZ) was potential jaguar habitat, which was to be further refined by their GIS analysis.

A Povilis pointed out & visually displayed that the Center’s mapping which represented relatively strict adherence to the criteria appeared to be similar in appearance when compared to the mapping product developed by the NMDGF 2004-mapping effort; The exception was that the Center included a large area within northeastern New Mexico, around Albuquerque. It was suggested that these areas of non-conformity could be treated as “out-liers” in the analysis.

These comments were supplemented/augmented by additional discussions relative to the mechanical application of the habitat suitability criteria, additional perception/acceptance of the Center’s results, suggestions directed toward obtaining a more objective analysis by “qualified biologist” and that nevertheless, this analysis process was a collaborative effort. At more or less the same time, 3 to 4 proposals were proposed & seconded, discussed & re-proposed & seconded before JAGHAB finally honed in on what was eventually to be a-meeting-of-the-collective-minds; As a result of seemingly, more productive & focused afternoon discussions, JAGHAB arrived at the following general consensus; although not at a unanimous consensus:

1. The CBD’s jaguar habitat suitability report and mapping for New Mexico would be conditionally accepted as a baseline product that reflects a potential habitat analysis that was the result of strictly adhering to the habitat criteria approved by JAGCT;
2. The NMDGF’s jaguar habitat suitability report & map products would also be accepted as a more refined analysis of potential habitat criterion using different but still germane criteria;
3. The Sierra Institute’s report would also be accepted as a reasoned assessment of jaguar habitat that identifies much of the same habitat as the reports by the CBD and NMDGF reports;
4. These documents along with a revised AZ report & maps would be included in a to-be-revised “JAGHAB Report” in an appendix;

5. The new JAGHAB report will include the CBD report & the NMDGF report merged in such a manner that retains all of the available data;
6. All of these “documents” will be united/combined via an introductory disclaimer & compendium
7. The to-be-revised CBD document will include all comments plus those yet to be provided by B. Brown; each comment will be addressed on a line-by-line basis;
8. The “new” products will include 2 maps, one developed for each State, which strictly adheres to the habitat criteria; 2-refined analysis habitat maps provided by the respective state game & fish departments; there will also be a composite map of the previous analysis approaches;
9. The Southwest Re-gap (?) data would be used by both AZGFD & NMDGF in refining the data relative to their respective States;
10. The title of the reports will be revised to read something to the effect of “Potential Jaguar Habitat Criteria.”

In order to accomplish, the preceding tasks, Bill Van Pelt, AZGFD volunteered/agreed to be in charge of the compilation of the various report/mapping processes; He will develop the text for the new report for review to the Habitat Sub-committee/Group by December 2, 2005; The deadline for comments on this report will be December 30, 2005; The Final products, less maps, will be available by January 10, 2006; All products will be available for final review & presentation to the JAGTC, at the Team’s next scheduled meetings; These meetings are scheduled for January 19<sup>th</sup> & 20<sup>th</sup>, 2006 Jaguar Conservation Team Meeting in Douglas, AZ (?)

Finally, at approximately 1715 hours, the “meeting” was adjourned to unanimous approval.